

Claims

What is claimed is:

1. In a skewed roller brake assembly having a main axis of rotation, having a first plate adapted to be rotated about said main axis, having a second plate adapted to be
5 rotated relative to said first plate about said main axis, and having an intermediate plate positioned between said first and second plates, said first and second plates being adapted to be axially loaded with respect to one another, said intermediate plate having a slot bounded by a first wall that is arranged at a first angle with respect to a radius from said main axis, and having a cylindrical roller arranged in said slot for rolling engagement
10 with said first and second plates about the axis of said roller such that said roller axis will be urged toward a position parallel to said first wall when said first and second plates are rotated relative to one another in one angular direction, the improvement which comprises:
said slot having a second wall arranged at a second angle with respect to a radius
15 from said main axis such that said roller axis will be urged toward a position parallel to said second wall when said first and second plates are rotated relative to one another in the opposite angular direction;
whereby the resistance to relative rotation between said first and second plates for the same value of axial loading may differ as a function of the direction of relative angular
20 lar rotation between said first and second plates.
2. The improvement as set forth in claim 1 wherein said second wall is substantially parallel to a radius from said main axis.
3. The improvement as set forth in claim 1 wherein said roller is mounted in said slot for movement between said first and second walls.
- 25 4. The improvement as set forth in claim 1 wherein said intermediate plate has a plurality of said slots, and wherein said assembly includes a corresponding plurality of

said rollers, with one of said rollers being operatively arranged in a respective one of said slots.

5. The improvement as set forth in claim 1 wherein said roller is restrained from moving axially when said roller axis is parallel to said first wall.
- 5 6. The improvement as set forth in claim 1 wherein said roller is restrained from moving axially when said roller axis is parallel to said second wall.
7. The improvement as set forth in claim 1 wherein said intermediate plate is adapted to rotate about said main axis.